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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,304	11/21/2003	Bruce David D'Amora	YOR920030419US1	3006

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EXAMINER	
GOOD JOHNSON, MOTILEWA	

ART UNIT	PAPER NUMBER
2628	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/719,304	D'AMORA, BRUCE DAVID	
	Examiner	Art Unit	
	Motilewa Good-Johnson	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-27* is/are rejected.

7)☒ Claim(s) *3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02/11/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2 and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deering, U.S. Publication 2002/0050992 A1, in view of Julien, U.S. Patent Number 6,556,207 B1.

Regarding claim 1, Deering discloses a method for using fixed point data, the method comprising the steps of: determining a quantization transform corresponding to a image positions (paragraph 0089-0093), the quantization transform useable for converting a floating point space to a fixed point space, wherein the floating point space contains one or more floating point data corresponding to the geometric object (paragraph 0089-0093); and converting, by using the quantization transform, the one or more floating point data to one or more fixed point data (paragraph 0089)

However, it is noted that Deering fails to disclose representing a three-dimensional scene and determining a quantization transform corresponding to a geometric object and further the object representing at least a portion of the three-dimensional scene.

Julien discloses data signal for animation of a graphic scene to be used for constructing images. Julien discloses representing a three-dimensional scene (col. 1,

lines 5-14) and determining a quantization transform corresponding to a geometric object (col. 2, lines 6-12) and further the object representing at least a portion of the three-dimensional scene (col. 2, lines 8-9)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the quantization transform as disclosed by Deering for three dimensional graphics data the geometric objects and the three dimensional scene as disclosed by Julien, to reproduce animated graphic scenes sot they can be stored and or transmitted.

Regarding claim 2, Deering discloses wherein the geometric object represents at least a portion of an object in a three-dimensional scene (paragraph 0003)

Regarding claim 4, Deering discloses wherein the step of determining a quantization transform further comprises the step of determining a bounding sphere defining extents of the floating point space represented by the geometric data in the three-dimensional scene, and wherein the one or more floating point data are contained within the bounding sphere (paragraph 0100)

Regarding claim 5, Deering discloses wherein the step of determining a quantization transform further comprises the steps of: determining extents of the bounding sphere; and mapping the extents of the bounding sphere to data having values falling between first and second integer values (paragraphs 0106-0107)

Regarding claim 6, Deering discloses wherein the step of determining extents of the bounding sphere further comprises the step of computing at least one minimum vertex value and at least one maximum vertex value for all geometric objects in at least a portion of the three-dimensional scene (paragraph 0110)

Regarding claim 7, Deering discloses where the step of mapping uses a radius of the bounding sphere, a center of the bounding sphere, and minimum and maximum integer values (paragraphs 0112-0116)

Regarding claim 8, Julien discloses wherein quantization transform comprises a scale factor and a translate factor (col. 5, line 61 – col. 6, line 26)

Regarding claim 9, Julien discloses further comprising the steps off computing a first transform comprising one or more of scale, rotate, and computing an inverse of the first transform (col. 5, lines 14-24); computing an inverse of the quantization transform (col. 5, lines 20-24); concatenating the inverse of the quantization transform and the inverse of the first transform to create a second transform (col. 3, lines 45-51)

Regarding claim 10, Deering discloses wherein the first transform is a ModelView transform or a concatenation of more than one ModelView transform (paragraph 0102)

Regarding claim 11, Julien discloses further comprising the steps of: converting one or more normals corresponding to the geometric object from floating point data to fixed point data (col. 5, lines 7-13); and combining textures associated with the geometric object into a single texture map (col. 6, lines 10-26)

Regarding claim 12, Julien discloses further comprising the steps of storing the one or more fixed point data in a quantized scene file; and storing the second transform in the quantized scene file (col. 3, lines 45-51)

Regarding claim 13, Julien discloses wherein the floating point data are vertices corresponding to the geometric object (col. 2, lines 5-17)

Regarding claim 14, Julien discloses wherein the geometric object corresponds to a Geometry node of a scene graph (col. 1, lines 28-30)

Regarding claim 15, it is rejected based upon similar rational as above claim 1. Deering further discloses memories 170 and 180, and processor 60.

Regarding claim 16, it is rejected based upon similar rational as above. Deering further discloses an article of manufacture 80 for representing a three-dimensional graphics data using fixed point data, the article of manufacture comprising: a computer readable medium (80) containing one or more programs.

Regarding claims 17 and 20-26, they are rejected based upon similar rational as above.

Regarding claim 18, Julien discloses wherein the step of determining a quantization transform further comprises the step of reading the quantization transform from a file, wherein the file comprises the quantization transform and the one or more fixed point data corresponding to the geometric object (col. 3, lines 45-51)

Regarding claim 19, Julien discloses wherein a file comprises a plurality of geometric objects (col. 1, lines 26-30), and wherein the method further comprises the steps of: parsing the file; and creating a scene graph from the parsed file (col. 1, lines 32-33)

Regarding claim 27, it is rejected based upon similar rational as above claim 17. Deering further discloses memories 170 and 180, and processor 60.

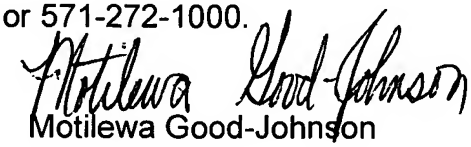
Allowable Subject Matter

3. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa Good-Johnson whose telephone number is (571) 272-7658. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Motilewa Good-Johnson
Examiner
Art Unit 2628

mgj